

<110> Conklin, Darrell C.
Blumberg, Hal

<130> 97-63C1

<151> 1997-10-06

<151> 1998-10-06

<160> 28

<170> FastSEQ for Windows Version 3.0

 $\langle 210 \rangle$ 1

<211> 876

<212> DNA

<213> Homo sapiens

 $\langle 220 \rangle$

<221> CDS

<222> (119)...(823)

 $\langle 400 \rangle$ 1

```

gccgcgccct gccgcacacg accgctgcc gcccttgcc ttcctgaccc aggggctccg      60
ctggctgagg tcgctggga gctgccgcca gggccaggag gggagcgga cctggaag      118
atg cgc cca ttg gct ggt ggc ctg ctc aag gtg gtg ttc gtg gtc ttc      166
Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val Phe
      1             5             10             15

```

gcc tcc ttg tgt gcc tgg tat tcg ggg tac ctg ctc gca gag ctc att 214
Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu Leu Ile
20 25 30

cca gat gca ccc ctg tcc agt gct gcc tat agc atc cgc agc atc ggg	262
Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg Ser Ile Gly	
35 40 45	
gag agg cct gtc ctc aaa gct cca gtc ccc aaa agg caa aaa tgt gac	310
Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg Gln Lys Cys Asp	
50 55 60	
cac tgg act ccc tgc cca tct gac acc tat gcc tac agg tta ctc agc	358
His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala Tyr Arg Leu Leu Ser	
65 70 75 80	
gga ggt ggc aga agc aag tac gcc aaa atc tgc ttt gag gat aac cta	406
Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile Cys Phe Glu Asp Asn Leu	
85 90 95	
ctt atg gga gaa cag ctg gga aat gtt gcc aga gga ata aac att gcc	454
Leu Met Gly Glu Gln Leu Gly Asn Val Ala Arg Gly Ile Asn Ile Ala	
100 105 110	
att gtc aac tat gta act ggg aat gtg aca gca aca cga tgt ttt gat	502
Ile Val Asn Tyr Val Thr Gly Asn Val Thr Ala Thr Arg Cys Phe Asp	
115 120 125	
atg tat gaa ggc gat aac tct gga ccg atg aca aag ttt att cag agt	550
Met Tyr Glu Gly Asp Asn Ser Gly Pro Met Thr Lys Phe Ile Gln Ser	
130 135 140	
gct gct cca aaa tcc ctg ctc ttc atg gtg acc tat gac gac gga agc	598
Ala Ala Pro Lys Ser Leu Leu Phe Met Val Thr Tyr Asp Asp Gly Ser	
145 150 155 160	
aca aga ctg aat aac gat gcc aag aat gcc ata gaa gca ctt gga agt	646
Thr Arg Leu Asn Asn Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser	
165 170 175	
aaa gaa atc agg aac atg aaa ttc agg tct agc tgg gta ttt att gca	694
Lys Glu Ile Arg Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala	
180 185 190	
gca aaa ggc ttg gaa ctc cct tcc gaa att cag aga gaa aag atc aac	742
Ala Lys Gly Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn	
195 200 205	

1003936-103661

cac tct gat gct aag aac aac aga tat tct ggc tgg cct gca gag atc 790
 His Ser Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile
 210 215 220

cag ata gaa ggc tgc ata ccc aaa gaa cga agc tgacactgca gggtcctgag 843
 Gln Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser
 225 230 235

taaatgtgtt ctgtataaac aaatgcagct gga 876

<210> 2

<211> 235

<212> PRT

<213> Homo sapiens

<400> 2

Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val Phe
 1 5 10 15
 Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu Leu Ile
 20 25 30
 Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg Ser Ile Gly
 35 40 45
 Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg Gln Lys Cys Asp
 50 55 60
 His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala Tyr Arg Leu Leu Ser
 65 70 75 80
 Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile Cys Phe Glu Asp Asn Leu
 85 90 95
 Leu Met Gly Glu Gln Leu Gly Asn Val Ala Arg Gly Ile Asn Ile Ala
 100 105 110
 Ile Val Asn Tyr Val Thr Gly Asn Val Thr Ala Thr Arg Cys Phe Asp
 115 120 125
 Met Tyr Glu Gly Asp Asn Ser Gly Pro Met Thr Lys Phe Ile Gln Ser
 130 135 140
 Ala Ala Pro Lys Ser Leu Leu Phe Met Val Thr Tyr Asp Asp Gly Ser
 145 150 155 160
 Thr Arg Leu Asn Asn Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser
 165 170 175
 Lys Glu Ile Arg Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala
 180 185 190
 Ala Lys Gly Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn
 195 200 205

10030076.102601

His Ser Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile
 210 215 220
 Gln Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser
 225 230 235

<210> 3
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Motif 1. corresponding to residues 127 to 129 of
 SEQ ID NO:2

<400> 3
 Phe Asp Met
 1

<210> 4
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Motif 2. corresponding to residues 156 to 158 of
 SEQ ID NO:2

<400> 4
 Tyr Asp Asp
 1

<210> 5
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Motif 3. corresponding to residues 174 to 176 of
 SEQ ID NO:2

<400> 5
 Leu Gly Ser
 1

10039876-103604

<210> 6
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Motif 4, corresponding to residues 188 to 190 of
 SEQ ID NO:2

<400> 6
 Trp Val Phe
 1

<210> 7
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Motif 5, corresponding to residues 227 to 229 of
 SEQ ID NO:2

<400> 7
 Glu Gly Cys
 1

<210> 8
 <211> 705
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> z219a Degenerate polynucleotide sequence

<221> variation
 <222> (1)...(705)
 <223> N is any nucleotide

<221> misc_feature
 <222> (1)...(705)
 <223> n = A,T,C or G

10039376.102601

<400> 8

atgmgnccny tngcngngg nytnytnaar gtngtnttyg tngtnttygc nwsnytnthy	60
gcntggtayw snggntayyt nytnngcgar ytnathccng aygcncnyt nwsnwsngcn	120
gcntaywsna thmgwnsnat hggngarmgn ccngtnytna argcncngt nccnaarmgn	180
caraartgyg aycaytgac nccntgyccn wsngayacnt aygcntaymg nytnytnwsn	240
ggngngngnm gnwsnaarta ygcnaarath tgytthygarg ayaayytnyt natggngar	300
carytnggna aygtngcnmg nggnathaay athgcnathg tnaaytaygt nacnggnaay	360
gtnacngcna cnmgntgytt ygayatgtay gargngaya aywsnggncc natgacnaar	420
ttyathcarw sngcngcncc naarwsnytn ytnttyatgg tnacntayga ygaygnwsn	480
acnmgnytna ayaaygaygc naaraaygn athgargcny tnggnwsnaa rgarathmgn	540
aayatgaart tymgnwsnws ntgggtntty athgngcna arggnytna rytncnwsn	600
garathcarm gngaraarat haaycaywsn gaygcnaara ayaaymgnta ywsnggntgg	660
ccngngara thcarathga rggntgyath ccnaargarm gnwsn	705

<210> 9

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC695

<400> 9

gatttaggtg acactatag	19
----------------------	----

<210> 10

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC7231

<400> 10

tttttttttt tttttttttt tttttv	26
------------------------------	----

<210> 11

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC13695

1003997.10004

<400> 11
cccttccgaa attcagagag 20

<210> 12
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer ZC13789

<400> 12
tccctgcccc tctgacacct 20

<210> 13
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer ZC13790

<400> 13
ccagctgttc tcccataagt 20

<210> 14
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer ZC14069

<400> 14
cttggcatcg ttattcagtc t 21

<210> 15
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC13072

<400> 15

aggtcctggg caagtgcctgc

20

<210> 16

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC13956

<400> 16

gtggtgttcg tggctctc

18

<210> 17

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC13957

<400> 17

cgatgctgcg gatgctat

18

<210> 18

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> z219aCEE polypeptide with C-terminal GluGlu tag

<400> 18

Met	Arg	Pro	Leu	Ala	Gly	Gly	Leu	Leu	Lys	Val	Val	Phe	Val	Val	Phe
1			5				10					15			
Ala	Ser	Leu	Cys	Ala	Trp	Tyr	Ser	Gly	Tyr	Leu	Leu	Ala	Glu	Leu	Ile
		20				25				30					
Pro	Asp	Ala	Pro	Leu	Ser	Ser	Ala	Ala	Tyr	Ser	Ile	Arg	Ser	Ile	Gly
	35					40						45			

<210> 19
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer ZC14870

25

<210> 20
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC15101

<400> 20

tacgatggat ccgcttcggt cttt

24

<210> 21

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Glu-Glu tag sequence with linker

<400> 21

Gly Ser Glu Tyr Met Pro Met Glu

1

5

<210> 22

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC13006

<400> 22

ggctgtcctc taagcgtcac

20

<210> 23

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC13007

<400> 23

aggggtcaca gggatgcca

19

<210> 24

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> EE peptide sequence

<400> 24

Glu Tyr Met Pro Val Asp

1

5

<210> 25

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC12700

<400> 25

ggaggtctat ataagcagag c

21

<210> 26

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC12742

<400> 26

ttatgtttca gggttcagggg

20

<210> 27

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC17184

<400> 27

cgtacgggcg cgcctcagct tcgttctttg gg

32

<210> 28

32